

IN THE CLAIMS:

Please cancel claims 2-4, 7 and 9 in their entirety without prejudice nor disclaimer of the subject matter set forth therein.

Please amend claims 1, 6 and 8 as follows.

1. (Currently Amended) A friction agitation processing method of processing a workpiece by penetrating a rotating processing tool into the workpiece ~~keeping rotation~~ and removing the rotating processing tool from the workpiece after completion of friction agitation processing, said friction agitation processing method comprising the steps of:

mounting a processing tool to an automatic machine for putting said processing tool in position with respect to the workpiece;

providing an emergency stop demand signal for demanding a stop of the said processing tool in execution of the friction agitation processing in an emergency;

stopping said automatic machine and said processing tool immediately upon appearance of said emergency stop demand signal while the friction agitation processing is unexecuted;

~~executing a removal of the~~ removing said processing tool from the workpiece after finishing scheduled friction agitation processing within a predetermined period of time from at appearance of said emergency stop demand signal while the friction agitation processing is executed; and

stopping rotation of the processing tool after operation of said automatic machine ~~said removal of the processing tool from the workpiece~~ and subsequent to a lapse of said predetermined period of time.

2.-4. (Canceled)

5. (Original) A friction agitation processing method as defined in claim 1, wherein the friction agitation processing is applied to forming a weld across a joint between superposed metal plate workpieces.

6. (Currently Amended) A friction agitation processing apparatus for processing a workpiece by a processing tool that is penetrated into a workpiece keeping rotation and removed from the workpiece after friction agitation processing, said friction agitation processing apparatus comprising:

an automatic machine for holding a processing tool thereto and putting said processing tool in position with respect to the workpiece;

emergency stop means for providing an emergency stop demand signal for demanding a stop of the processing tool ~~in execution of the friction agitation processing~~ in an emergency;

execution detection means for detecting execution of the friction agitation processing by the processing tool;

timing means for stopping rotation of said processing tool after a lapse of a predetermined period of time from appearance of said emergency stop demand signal; and

stop control means for stopping rotation of ~~the said processing tool and said automatic machine immediately upon~~ after removal of the processing tool from the workpiece at appearance of said emergency stop demand signal from said emergency stop means when said execution detection means detects ~~execution~~ unexecution of the friction agitation processing, and finishing scheduled friction agitation processing within said predetermined period of time and subsequently stopping rotation of said processing tool and operation of said automatic machine, after removal of said processing tool from the work piece, upon appearance of said emergency stop demand signal from said emergency stop

means when said execution detection means detects execution of the friction agitation processing.

7. (Canceled)

8. (Currently Amended) A friction agitation processing apparatus as defined in claim ~~7~~ 6, wherein the processing tool and said automatic machine ~~is~~ are enclosed by a safety fence provided with a door and electromagnetic lock means for locking and unlocking the door, said electromagnetic lock means keeping said door locked until said finishing time.

9. (Canceled)

10. (Original) A friction agitation processing apparatus as defined in claim 6, wherein the friction agitation processing is applied to forming a weld across a joint between superposed metal plate workpieces.